ABSTRACT

A method for controlling charging of a power source of a hybrid vehicle. The method includes determining a maximum output level of a primary power source, determining a state of charge of a secondary power source, determining a charge torque modifier value based on the maximum output torque level and the state of charge, determining a target torque level for an electrical machine based on the charge torque modifier value, and driving the electrical machine at the target torque level with the primary power source to charge the secondary power source.